



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,546	06/18/2001	Paul Donato	28049/37454	1399
34431 7590 08/23/2007 HANLEY, FLIGHT & ZIMMERMAN, LLC 150 S. WACKER DRIVE SUITE 2100 CHICAGO, IL 60606			EXAMINER SHANG, ANNAN Q	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 08/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/883,546

Applicant(s)

DONATO, PAUL

Examiner

Annan Q. Shang

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-23,37,38,41,44,46-51,53-64,67-69,75-78,82-93,96-101,103-122 and 124-193 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/26/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1-8,10-23,37,38,41,44,46-51,53-64,67-69,75-78,82-93,96-101,103-122 and 124-193.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-33, 35, 37-53, 68-69, 73-78, 82-93, 96-101, 105-122 and 126-193 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Williams et al (5,945,988)** and in view of **Maissel et al (2003/0088872)** previously cited.

As to claim 1, note the **Williams** reference figures 1-3, discloses method and apparatus for automatically determining and dynamically updating user preferences in an entertainment system and further discloses a method comprising:

Determining a probability that the audience member is in an audience of a program being viewed at a first location; adding the audience member to a log of audience members for the program when the probability is greater than a threshold; Prompting the audience member to enter an audience member identification when the probability is less than a threshold (System Controller 'SC' 104 or 100, figs.1-3, col.3, lines 4-23, col.5, lines 8-13, col., lines 36-65, col.9, line 31-col.10, line 25, line 60-col.11, line 30), note that S-100 stores profiles of users (col.5, line 30-col.6, line 1+) and includes Camera 120 (col.3, lines 58-63) to detect a user presenting watching a TV channel/program at the receiver and SC-104 monitors a user behavior log (B-log), inputs or interactions (col.8, line 59-col.9, line 1+) to automatically determine, using

Art Unit: 2623

statistically generated information of the B-log and the information received from the Camera, a user at the receiver, furthermore if an audience member watches a particular program more frequently the audience member is added to the list of audience members and store on a remote server for later access if necessary; note further that SC-104 identifies whether (B-log) or "tuning habits, history and style," such as a user input or interactions to a tuned channel(s)/station, video image of the user, audio recognition, rate of changing channels, etc., col.8, line 54-col.9, line 21, matches that of the data for any of the known users and calculates a user metric for information in B-log and the current system settings as well as each of the known system users, and if there is greater than a predetermined probability "a threshold" that the information in the B-log matches the user profile of one of the known users, SC-104 determines that a match has been made and configures S-100 in accordance with user profile database 700; if SC-104 identifies the most likely system user, i.e., a state where "the audience of the receiver is less than a threshold" or B-log is less than the threshold (a new user, col.8, lines 49-65, or known user), the SC-104 displays a first identified picture of known pictures or audio prompts requesting that the user affirmatively respond via remote control, voice command, etc., (col.9, line 64-col.10, line 12), note further that SC-104 compares audio, video image of the user, B-log, profiles data, etc., (col.10, lines 37-59) and at any point in time displays prompts to the user for identification if a generator B-log, stored profile, video image, etc., or any user settings differs from the system settings; furthermore even if a user changes his/her settings (profile and B-log, col.3,

Art Unit: 2623

lines 4-23 and col.8, line 56-col.9, line 42), SC-104 automatically and dynamically determines a user (col.15, lines 26-40), using the various methods discussed above.

Uploading the log of audience members to a data collection server (Remote Server), the data collection server to receive one or more logs of audience members from one or more additional locations (col.8, lines 12-42, col.10, line 60-col.11, line 30 and col.14, lines 25-32).

Williams, adds audience members to programs of interest without prompting the audience member, but is silent to adding the audience member to a log of audience members to the program being viewed within a predetermined time interval(s).

However, **Maissel** discloses a television network, which monitors audience members of a program being viewed within predetermined time intervals which partially overlaps and provides real-time alerts to audience members as to the number of audience viewing a particular program(s) at a particular time period(s) (figs.1-8, page 3, [0055-0057], [0072-0081], [0092-0093], [0170-0171] and [0245-0247]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Maissel into the system of Williams to generate real time information of percentage of audience viewing a particular program and further provide the audiences with alerts as to the percentage of audience viewing a particular program.

As to claim 2, William further discloses determining whether the audience member has already entered the audience member identification, adding the audience members for the program when the audience member enters the audience member

identification and suppressing prompting of the audience member when the audience member has already entered the audience member identification (col.3, lines 4-23, col.5, lines 3-53 and col.9, line 64-col.10, line 12), note that SC-104 automatically determines a user of a plurality of users, with or without the user's interactions or direct communication using RC or audio responds.

As to claim 3, William further discloses waiting for passage of a predetermined amount of time from a previous prompting decision, and determining a second probability that a second audience member is also in the audience of the program being at the first location (col.9, lines 43-53 and line 64-col.10, line 12).

Claim 4 is met as previously discussed with respect to claim 1.

As to claim 5, William further discloses prompting the audience member to enter the audience member identification upon detection that the receiver has been turned on (col.9, line 15-30, lines 43-53 and line 64-col.10, line 25).

Claim 6 is met as previously discussed with respect to claim 2.

As to claims 7-8, Williams further determines the probability that the audience member is in the audience of the program being viewed at the first location based upon a number of times that the audience member has viewed one or more programs at the first location during a corresponding day part (col.7, lines 14-62 and col.8, line 12-42).

Claim 10 is met as previously discussed with respect to claim 1.

Claim 11 is met as previously discussed with respect to claims 1-2.

Claim 12 is met as previously discussed with respect to claim 1.

Claim 13 is met as previously discussed with respect to claims 1.

As to claim 14-15, Williams further discloses storing audience identification data in tables, collapsing the tables if the tables contain insufficient data to make a prompting decision (col.5, line 30-col.6, line 23) and collapsing of the tables is weighted depending upon age of the audience member identification data (col.6, line 23-32 and col.10, lines 26-36).

Claim 16 is met as previously discussed with respect to claim 1.

Claims 17-23 are met as previously discussed with respect to claim 1. William further teaches monitoring profiles and B-log data for during a predetermining time periods (col.6, lines 52-64 and col.7, lines 14-41) and further uses SIDs to identifies various classes of programs, sports, movies, drama, etc., and present to each user identified EPG specific to a user's profile and B-log information (figs.7-8 and col.5, line 39-col.6, line 56 and col.7, lines 14-51).

Claims 37-38 are met as previously discussed with respect to claims 14-15.

Claims 41-43 are met as previously discussed with respect to claim 1.

Claim 44 is met as previously discussed with respect to claim 1.

Claim 46 is met as previously discussed with respect to claim 7.

Claim 47 is met as previously discussed with respect to claims 17-23.

Claims 48-49 are met as previously discussed with respect to claim 1.

Claim 50 is met as previously discussed with respect to claims 17-23.

Claim 51 is met as previously discussed with respect to claim 1.

Claim 53 is met as previously discussed with respect to claim 1.

Claim 68 is met as previously discussed with respect to claim 1.

As to claim 69, Williams further monitors tuning style, which comprises velocity or the rate of changing channels and tuning acceleration (col.7, line 63-col.8, line 11 and col.9, lines 43-63).

Claim 75 is met as previously discussed with respect to claims 7.

Claim 76 met as previously discussed with respect to claims 14-15.

Claim 77 met as previously discussed with respect to claims 1 and 69.

Claim 78 is met as previously discussed with respect to claim 69.

Claims 82-88 are met as previously discussed with respect to claims 17-23.

Claim 89 is met as previously discussed with respect to claim 3.

Claim 90 is met as previously discussed with respect to claim 5.

As to claims 91-92, the claimed "An article of manufacture..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 93 is met as previously discussed with respect to claims 7-8.

Claim 96 is met as previously discussed with respect to claim 1.

Claim 97 is met as previously discussed with respect to claim 5.

Claim 98 is met as previously discussed with respect to claim 1.

Claim 99 is met as previously discussed with respect to claims 7-8.

Claim 100 is met as previously discussed with respect to claim 20.

Claim 101 is met as previously discussed with respect to claim 69.

Claims 105-107 are met as previously discussed with respect to claim 69.

Claims 108-113 are met as previously discussed with respect to claim 1.

Claim 114 is met as previously discussed with respect to claims 14-15.

Claim 115 is met as previously discussed with respect to claims 14-15.

As to claims 116-117, the claimed "an apparatus comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 118 is met as previously discussed with respect to claims 7-8.

Claim 119 is met as previously discussed with respect to claim 1.

Claim 120 is met as previously discussed with respect to claim 5.

Claim 121 is met as previously discussed with respect to claim 1.

Claim 122 is met as previously discussed with respect to claim 69.

Claim 125 is met as previously discussed with respect to claim 20.

Claims 126-127 are met as previously discussed with respect to claim 69.

Claims 128-132 are met as previously discussed with respect to claim 1.

Claim 133 is met as previously discussed with respect to claim 14.

Claim 134 is met as previously discussed with respect to claims 1 and 69.

Claims 135-136 are met as previously discussed with respect to claims 1 and 69.

Claims 137-138 are met as previously discussed with respect to claim 1.

Claims 139-141 are met as previously discussed with respect to claim 69.

Claims 142-143 are met as previously discussed with respect to claim 1.

Claim 144 is met as previously discussed with respect to claims 1 and 69.

Claims 145-146 are met as previously discussed with respect to claims 1 and 69.

Claims 147-151 are met as previously discussed with respect to claims 1 and 16.

Claim 151 is met as previously discussed with respect to claim 69.

Claims 152-154 are met as previously discussed with respect to claim 1.

Claims 155-156 are met as previously discussed with respect to claims 1 and 69.

Claim 157 is met as previously discussed with respect to claim 69.

Claims 158-160 are met as previously discussed with respect to claims 1 and 16.

Claim 161-162 are met as previously discussed with respect to claims 1 and 69.

Claim 163 is met as previously discussed with respect to claim 69.

Claims 164-166 are met as previously discussed with respect to claims 1 and 16.

Claim 167 is met as previously discussed with respect to claim 1 and 69.

Claims 168-169 are met as previously discussed with respect to claims 1 and 69.

Claims 170-171 are met as previously discussed with respect to claims 1 and 16.

Claims 172-176 are met as previously discussed with respect to claims 1 and 16.

Claims 177-181 are met as previously discussed with respect to claims 1 and 16.

As to claims 182-183, the claimed "A method..." is composed of the same structural elements that were discussed in the rejection of claim 1.

As to claims 184-185, the claimed "An article of manufacture..." is composed of the same structural elements that were discussed in the rejection of claim 1.

As to claims 186-187, the claimed "An apparatus..." is composed of the same structural elements that were discussed in the rejection of claim 1.

As to claims 188-189, the claimed "A method..." is composed of the same structural elements that were discussed in the rejection of claim 1.

As to claims 190-191, the claimed "An article of manufacture..." is composed of the same structural elements that were discussed in the rejection of claim 1.

As to claims 192-193, the claimed "An apparatus..." is composed of the same structural elements that were discussed in the rejection of claim 1.

3. Claims 54-67, 103-104 and 124-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Williams et al (5,945,988)** in view of **Maissel et al (6,637,029)** and further in view of **Eldering et al (6,457,010)**

As to claims 54-55 and 57, William as modified by Maissel, teach the claimed limitations as previously discussed with respect to claim 1, but fails to explicitly teach applying a heuristic to determine where the audience member is in an audience of the receiver.

However, in the same field of endeavor **Eldering** teachings client-server subscriber characterization system and applies a heuristic to a user (col.13, lines 3-20 and col.14, lines 6-17).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Eldering into the system of William as modified by Maissel to quickly determine a user's profile or B-log and configure the system to provide the specific service(s) to each user.

Claim 56 is met as previously discussed with respect to claim 7.

Claims 58-64 are met as previously discussed with respect to claims 17-23.

Claim 65 is met as previously discussed with respect to claim 3.

Claim 66 is met as previously discussed with respect to claim 5.

Claim 67 is met as previously discussed with respect to claim 14.

As to claims 103-104, William as modified by Maissel, teach all the claimed limitations as previously discussed with respect to claim 91 above, but fail to explicitly teach the claimed limitations of claims 103-104, which is met as previously discussed with respect to claims 1 and 54-55.

As to claims 124-125, William as modified by Maissel, teach all the claimed limitations as previously discussed with respect to claim 116 above, but fail to explicitly teach the claimed limitations of claims 124-125, which is met as previously discussed with respect to claims 1 and 54-55.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8, 10-23, 37, 38, 41, 44, 46-51, 53-64, 67-69, 75-78, 82-93, 96-101, 103-122 and 124-193 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the claims necessitated the new ground(s) of rejection discussed above. **This office action is made final.**

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Herz et al (5,758,257) disclose system and method for scheduling broadcast of and access to video programs and other data using customer profiles.

Seidman et al (6,298,482) disclose system for two-way digital multimedia broadcast and interactive services.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone

Art Unit: 2623

number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.



Annan Q. Shang



CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600